Art C. Sharpe 15812 East 22nd Court Veradale, WA 99037



STATE OF WASHINGTON CERTIFICATE OF WATER RIGHT

Document Title: Certificate of Water Right

Agency: Department of Ecology

Eastern Regional Office 4601 North Monroe Spokane, WA 99205-1295 Applicant: Art C. Sharpe

15812 East 22nd Court Veradale, WA 99037

Reference Number:

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
March 27, 1995	S3-29829	S3-29829	S3-29829

This is to certify that the herein named applicant has made proof to the satisfaction of the Department of Ecology of a right to the use of the public waters of the State of Washington as herein defined, and under and specifically subject to the provisions contained in the Permit issued by the Department of Ecology, and that said right to the use of said waters has been perfected in accordance with the laws of the State of Washington, and is hereby confirmed by the Department of Ecology and entered of record as shown, but is limited to an amount actually beneficially used.

	P	UBLIC WATE	RS TO BE APPROPR	IATED		
SOURCE		TRIBUTARY OF (IF SU	TRIBUTARY OF (IF SURFACE WATERS)			
Pend Oreille River		Columbia River	Columbia River			
MAX. CUBIC FEET PER SECOND		D MAX.	MAX. GALLONS PER MINUTE		MAX. ACRE-FEET PER YEAR	
0.02					1.0	
QUANTITY/TYP	E OF USE/PERI	OD OF USE				
			year, each year, from M			
irrigation of 1/2	acre of lawn	and garden (bac	k-up supply for single do CATION OF DIVERS RANGE (E. OR W.) W.M.	mestic sup	ply of 1 home)	
irrigation of ½	acre of lawn	and garden (bac IPTION OF LO	k-up supply for single do CATION OF DIVERS	omestic sup	ply of 1 home) HDRAWAL	
irrigation of ½ LEC	SECTION	and garden (bac IPTION OF LO TOWNSHIP N. 36	k-up supply for single do DCATION OF DIVERS RANGE (E. OR W.) W.M.	omestic sup SION/WIT W.R.I.A.	ply of 1 home) HDRAWAL COUNTY	
irrigation of ½ LEG ¼¼ NW¼SE¼	SECTION 22	and garden (bac IPTION OF LO TOWNSHIP N. 36	k-up supply for single do DCATION OF DIVERS RANGE (E. OR W.) W.M.	w.R.I.A.	ply of 1 home) HDRAWAL COUNTY	
irrigation of ½ LEG ¼¼ NW¼SE¼ PARCEL#	SECTION 22 433622 51 90	and garden (bac IPTION OF LO TOWNSHIP N. 36	k-up supply for single do DCATION OF DIVERS RANGE (E. OR W.) W.M.	w.R.I.A. 62	ply of 1 home) HDRAWAL COUNTY Pend Oreille HAL LEGAL IS ON PAGE	

ADDITIONAL LEGAL IS ON PAGE 2

CONTINUED LEGAL DESCRIPTION FOR LOCATION OF DIVERSION/WITHDRAWAL

1775 feet North and 1600 feet West from the SE corner of Sec. 22 N. 48.6048807/W. 117.3553146

CONTINUED LEGAL DESCRIPTION FOR PROPERTY ON WHICH WATER IS TO BE USED

Lot 23, Block 2 of Lazy River Farmettes Unit 1 within the NW4SE4 of Sec. 22, T. 36 N., R. 43 E.W.M.

PROVISIONS

All conditions and requirements contained in reports of examination or permits previously issued apply to this certificate unless specifically noted below.

An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360 and/or WAC 508-64-020 through WAC 508-64-040.

This authorization to make use of public waters of the State is subject to existing rights, including any existing rights held by the United States for the benefit of Indians under treaty or otherwise.

Nothing in this authorization shall be construed as satisfying other applicable federal, state, or local statutes, ordinances, or regulations.

This certificate shall be issued subject to Washington Department of Fish and Wildlife screening criteria as outlined in a Hydraulic Project Approval. Please contact the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091, Attention: Habitat Management Division, Phone (360) 902-2534, to obtain specific requirements for your project.

Use of water under this authorization shall be contingent upon the water right holder's utilization of up to date water conservation practices and maintenance of efficient water delivery systems consistent with established regulation requirements and facility capabilities.

The Washington State Department of Fish and Wildlife (WDFW), has recommended that water rights from the Pend Oreille River be conditioned with instream flows of 7,700 cubic feet per second (cfs) on a year-round basis (as measured at the gage near Newport, Washington).

The following hydrographs for the U.S.G.S. Gage on the Pend Oreille River at Newport, Idaho (12395500) demonstrate important hydrologic characteristics of the Pend Oreille River. Before the construction of the Albeni Falls Dam, the river exhibited normal, riverine flow conditions. The first hydrograph shows the typical late summer flow regime for 10 different water years in the 1930s and early 1940s. The solid line at 7700 cfs represents WDFW's recommended instream flow value as it would have applied to the river in the 1930s. When summer flows reached their baseflow, they tended to stay down at that level for the remainder of the water year.

Provisions continued on Page 3

The right to use of the water aforesaid hereby confirmed is restricted to the lands or place of use herein described, except as provided in RCW 90.03.380, 90.03.390, and 90.44.100.

This certificate of water right is specifically subject to relinquishment for non-use of water as provided in Chapter 90.14 RCW.

Given under my hand and the seal of this office at Spokane, Washington, this 14th day of January, 2009.

DATA REVIEW

Certificate

ECY 040-1-2 (Rev. 8-97)

Lev. 8-97)

NT OF

Jay J. Manning, Director Department of Ecology

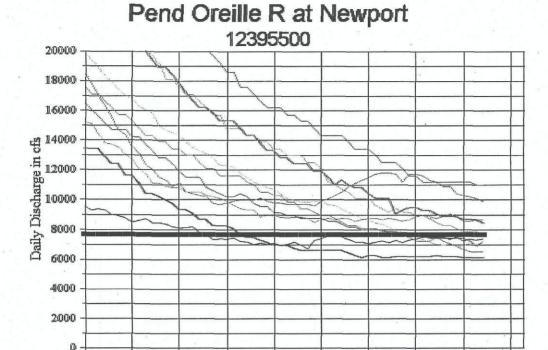
Keith L. Stoffel, Section Manager

S3-29829

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Provisions continued from Page 2

02-Aug



With the construction of the Albeni Falls dam in 1952, the character of the daily discharge changed dramatically from a riverine regime to an impounded, highly regulated, flow regime. The next hydrograph depicts the late summer, daily average discharge for a ten-year period in the 1980s through the early 1990s. The highly variable discharge data reflects the flows that result from the power generation demands that are placed on the river.

30-Aug

- 1933

1937 --- 1938 --- 1939 ---

1932

1931

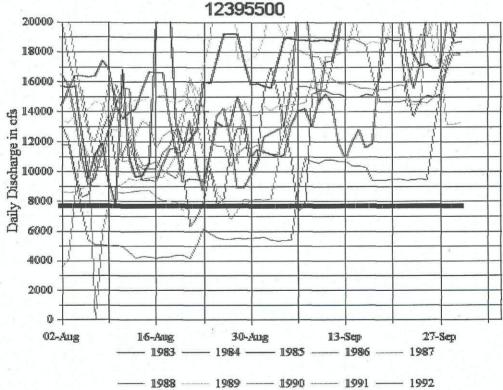
1936

13-Хер

1934

27-Sep

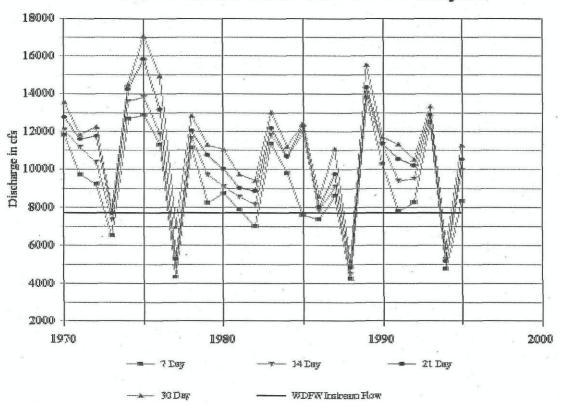
Pend Oreille R at Newport



Provisions continued on Page 4

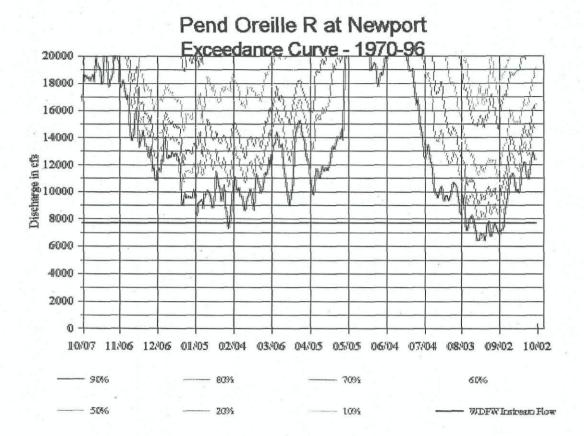
Trying to devise a methodology to implement the WDFW recommended instream flow given the current flow regime of the river requires some careful consideration of the day-to-day variability of the discharge. Given its fluctuations, just simply regulating junior water rights every time the daily average flow drops below 7700 cfs (the recommended instream flow) would be inappropriate and unworkable. Examining the data in the hydrograph indicates that the day-to-day variability is on the order of 5,000 cfs. Looking at a suite of duration frequency low flow analyses (7-day, 14-day, 21-day, and 30-day) for the 1970 through 1996 period allows us to get a better handle on when the flow in the river is truly flowing at a rate that is below the recommended instream flow. By looking at the actual daily flow data, we can see that three water years during the period 1970 – 96 exhibited sustained, low flow periods that were lower than the 7700 cfs threshold (1977, 1988, and 1994). The data from the duration frequency analysis shows that using a 14-day low flow criteria gives us the best opportunity to identify the low flow events.

Pend Oreille River Low Flow Analysis



Calculating the exceedance probability for the daily average flows for the period 1970-96 allows us to see how frequently (on a yearly basis) and for what duration (how many weeks during each year) the flows on the Pend Oreille River can be expected to be below the recommended instream flow. The following graph demonstrates that on average, we can expect the summer low flows in the Pend Oreille River will be above the instream flow 8 to 9 times out of ten years. During that one in ten year event when the flow in the river is below the recommended flow, the low flow will last for approximately one month (typically August).

Provisions continued on Page 5



Therefore, this certificate shall be conditioned that all diversion shall cease when the 14-day average flow in the Pend Oreille River falls below 7700 cfs (as measured at the Pend Oreille River at Newport gage) as recommended by WDFW.